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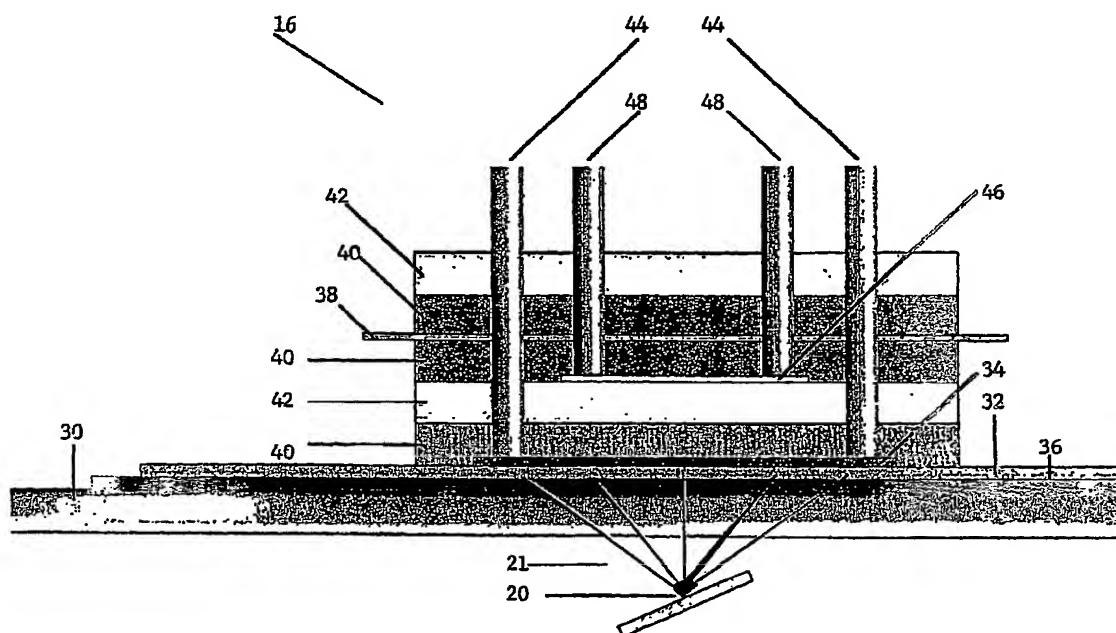
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- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PHOTOLYTIC OXYGENATOR WITH CARBON DIOXIDE AND/OR HYDROGEN SEPARATION AND FIXATION



(57) Abstract: Apparatus for oxygenating an enclosed space as well as removing carbon dioxide from the enclosed space. The apparatus comprises a photolytic cell (16) having an anode compartment with a photo-active surface having the ability to convert water to oxygen; a cathode compartment having the ability to convert carbon dioxide and hydrogen to a solid or liquid medium; and a light source (20) for providing light photons (21) to said photolytic cell and activating the photo-reactive surface.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26012

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C25B 1/00; C25C 1/02; C25D 17/00

US CL : 204/242, 252, 263-266; 205/340, 628, 633, 637

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 204/242, 252, 263-266; 205/340, 628, 633, 637

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST: photo? same cell; light near3 activated; 204/\$.ccls. and photo? and carbon near3 dioxide

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,466,869 A (AYERS) 21 August 1984 (21.08.1984, Figures 1, and columns 4-8.	1-3, 5, 13-14
A	US 4,478,699 A (HALMANN et al) 23 October 1984 (21.10.1984)	

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Further documents are listed in the continuation of Box C.

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See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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